

Appl. No. 10/646,239
Atty. Docket No.: 2002B117/2
Amdt. dated February 28, 2007
Reply to Office Action of May 12, 2006

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REMARKS/ARGUMENTS

This reply is in response to the Final Office Action dated December 29, 2006. Claims 56-111 are pending in the application and stand rejected. Reconsideration of the claims is respectfully requested.

Claims 56-111 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lue et al. (U.S. Patent No. 6,255,426; hereafter "Lue") in view of Wong et al. (U.S. Patent No. 6,358,457; hereafter "Wong") and Takahashi et al. (EP Patent No. 982 362; hereafter "Takahashi"). The Examiner states, "The rejection is over the three references taken as a whole." "Lue et al. fail to teach that at least one layer comprises one or more tackifiers. However, Takahashi et al. teach that it is well known... to add tackifiers or cling additives... . Therefore, it would have been obvious... to add the tackifier or cling agent to the layer within the claimed ranges in order to provide the film with cling properties without damaging the improved film properties, as taught by Takahashi et al." The Examiner further states, "Lue et al. and Takahashi et al. combined fail to explicitly teach that the film has a particular natural draw ratio, and tensile stress at separate elongation values." But, "Wong et al. teach that the natural stretch ratio is determined by factors such as the polymer composition and morphology caused by the process of forming the film." The Examiner then concludes that "it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made, since the film is formed of the same composition and made by the same process, would obviously have a natural draw ratio of the film of at least 300%, a tensile stress at the natural draw ratio of at least 26MPa, a tensile stress at the second yield of at least 14MPa, a tensile stress at first yield of at least 9MPa, and the film obviously has a yield plateau with a linear portion having a slope of at least 0.020 MPa per elongation, as taught by Wong et al."

Applicant respectfully traverses the rejection on grounds that a combination of Lue, Takahashi and Wong does not, teach, show or suggest the claimed invention. As stated in the specification and referring to the Applicant's publication (Ohlsson, US 2004/0048019 A1) at paragraph [0002], the present invention is directed to polyethylene stretch films. The term "stretch films" refers to a monolayer or multilayer film capable of stretching and applying a

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restoring force. See, Ohlsson at paragraph [0187]. The actual films, whether monolayer or multilayer, can have different overall properties depending upon the additives used, the polymers used, and the number and characteristics of different film layers. See, Id. at paragraph [0195]. For stretch film applications, tackifier is used in one or more layers to provide a cling force. See, Id. at paragraph [0188]. The presence of tackifier(s) changes the properties of a multilayer film such that stretch films that include tackifiers have different overall properties than films without. Therefore, films without, including those of Lue, do not inherently exhibit the same overall properties as films that do include tackifier, especially the properties of natural draw ratio, tensile stress at second yield and tensile stress at the natural draw ratio.

As noted and agreed by the Examiner, Lue does not teach, show, or suggest a multilayer stretch film comprising one or more tackifiers, and Lue does not teach, show, or suggest a multilayer film having a particular natural draw ratio, and tensile stress at separate elongation values. Wong also makes no mention of either. Particularly, Wong makes no mention of stretch films and Wong makes no mention of a film having a natural draw ratio of at least 250%, a tensile stress at the natural draw ratio of at least 22 MPa, and a tensile stress at second yield of at least 12 MPa, as recited in every claim. Takahashi discloses ethylene copolymer compositions that can include tackifier for uses as cling films but like the others, Takahashi makes no mention of a film having a natural draw ratio of at least 250%, a tensile stress at the natural draw ratio of at least 22 MPa, and a tensile stress at second yield of at least 12 MPa, as recited in every claim. Therefore, a mere combination of the references does not teach, show, or suggest the claimed invention because, at the very least, the combination of the references makes no mention of a multilayer film having a natural draw ratio of at least 250%, a tensile stress at the natural draw ratio of at least 22 MPa, and a tensile stress at second yield of at least 12 MPa, as recited in every claim.

The Examiner is kindly reminded that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). The Examiner's statement that "it would have been obvious... to add the tackifier or cling agent to the layer within the claimed ranges in order to provide the film with cling properties without

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damaging the improved film properties, as taught by Takahashi et al.," is erroneous. The Examiner cites to Takahashi et al. at page 34, lines 51-55 to support this assertion. Applicant's review of the reference at page 34, lines 51-55 found no such teaching. Clarification of the record is respectfully requested.

Further, the Examiner repeats the argument that "Wong et al. teach that the natural stretch ratio is determined by factors such as the polymer composition and morphology caused by the process of forming the film." However, such teaching is irrelevant. It is irrelevant whether Wong teaches that the natural stretch ratio is "determined by factors such as polymer composition and morphology caused by the process of forming the multilayer film." As stated above, multilayer stretch films that include tackifiers have different overall properties than films without, and films without do not exhibit the same overall properties as the films that do include tackifier, especially the properties of natural draw ratio, tensile stress at second yield and tensile stress at the natural draw ratio. Therefore, the polymer composition and morphology is not the driving force here. Instead, the presence of the tackifier is. Moreover, the actual films, whether monolayer or multilayer, can have different overall properties depending upon the additives used, polymers used, and the number and characteristics of different film layers, etc. The criticality or direction of the additives used and the number and characteristics of different film layers is not taught or suggested by Wong, Lue, or Takahashi, or any combination thereof. Accordingly, Wong does not show or suggest a desirability to combine its teachings with either Takahashi or Lue.

The Examiner is kindly reminded that "[I]n determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." See, M.P.E.P. § 2141.02 citing Stratoflex, Inc. v. Aeroquip Corp., 218 USPQ 871 (Fed. Cir. 1983). Wong does not teach, show, or suggest stretch films, and the combination of Lue, Wong, and Takahashi makes no mention of the presence and criticality of a tackifier to produce a multilayer film having the claimed combination of a large natural draw ratio, large tensile stress at second yield, and at the natural draw ratio. In fact, the combination of Lue, Wong, and Takahashi provides no direction to arrive at a multilayer film comprising a tackifier

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and having a combination of a large natural draw ratio, a large tensile stress at second yield, and at the natural draw ratio. It appears the Examiner has simply pieced together the Applicant's claimed invention with random teachings of the prior art. Therefore, the proposed combination of Wong, Lue, and Takahashi is erroneous and cannot support a rejection based on *prima facie* obviousness because the claimed invention as a whole is not obvious in view of Lue, Wong, and Takahashi. Withdrawal of the rejection and allowance of the claims is respectfully requested.

Notwithstanding, Applicant previously presented surprising and unexpected results which went unnoticed or ignored by the Examiner. As previously noted, the claimed film provides a combination of a large natural draw ratio, a large tensile stress at second yield, large tensile stress at the natural draw ratio, and a positive yield plateau slope large enough to absorb typical variations in film thickness uniformity without tiger striping. See, Id. at paragraph [0007]. This has not been taught, shown or suggested in the cited prior art. Furthermore, it has been surprisingly found that films of the claimed invention exhibit the claimed properties without suffering from local deformation leading to break, hole formation, tiger striping, or other defects. Id. at paragraph [0170]. Films of the claimed invention also show higher holding force than conventional films of the same film thickness. Id. Example 5 and Figures 2A and 2B show objective evidence of this conclusion. Moreover, it has been surprisingly found that multilayer films of the claimed invention exhibit improved properties, such as applicability over a wide range of stretch ratios without suffering from local deformation leading to break, hole formation, tiger striping, or other defects. For at least these reasons, the claimed invention provides surprising and unexpected results over the closest prior art, and should be allowed accordingly.

In response to the Examiner's assertion that "when the references (Lue and Takahashi) are taken as a whole the composition is the same as claimed and therefore must possess the same properties as taught by Wong," the Examiner is misinterpreting the law and the MPEP. Under 35 USC §103 and the MPEP, the Applicant can show proof of a surprising and unexpected result over the closest prior art. See, MPEP 716.02. The "closest prior art" is just that... a single reference not a combination of two references as suggested by the Examiner. That would be an impossible burden to provide proof of a surprising and unexpected result over a combination of two or more references. As such, the Examiner's assertion that "when the references (Lue and

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Takahashi) are taken as a whole the composition is the same" is irrelevant and erroneous. The closest prior art is either Lue or Takahashi, not a combination of both.

Considering the closest prior art, Lue makes no mention of tackifiers. Applicant has shown how the presence of tackifiers changes the properties of multilayer films, and the Examiner has provided no evidence from the prior art or literature to support an argument that the films of Lue obviously or inherently have the same properties of the claimed multilayer films. Similarly, Takahashi makes no mention of a multilayer film having a first surface layer comprising one or more tackifiers, a second surface layer, and a core layer disposed between the first and second surface layers, wherein the core layer comprises a polyethylene copolymer having a Compositional Distribution Breadth Index (CDBI) of at least 70%, a melt index $I_{2,16}$ of from 0.1 to 15 g/10 min., a density of from 0.910 to 0.940 g/cm³, a melt index ratio $I_{21.6}/I_{2,16}$ of from 30 to 80, and an Mw/Mn ratio of from 2.5 to 5.5. Takahashi also makes no mention of a film having a natural draw ratio of at least 250%, a tensile stress at the natural draw ratio of at least 22 MPa, and a tensile stress at second yield of at least 12 MPa, as recited in every claim. Therefore, Applicant has successfully provided evidence of surprising and unexpected results over each reference considered to be "the two closest prior art." For at least this reason, withdrawal of the rejection and allowance of the claims is respectfully requested.

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CONCLUSION

Having addressed all issues set out in the office action, Applicant respectfully submits that the pending claims are now in condition for allowance. Applicant invites the Examiner to telephone the undersigned attorney if there are any issues outstanding which have not been addressed to the Examiner's satisfaction. A petition for extension of time for filing this response is attached; however, in the event that petition becomes separated from this Response, the Commissioner is hereby authorized to charge counsel's Deposit Account No. 05-1712 (2002B117/2), for any fees, including extension of time fees and excess claim fees, required to make this response timely and acceptable to the Office.

Respectfully submitted,

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